

September 29, 1959

Professor Igor Tamm
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Dear Dr. Tamm:

Unless I have lost some of our correspondence, I find that I have neglected to write you since your cordial letter of March 18th. The continuity of my correspondence and recollections was interrupted by an extended trip that my wife and I made in Europe this spring. Since then we have moved both our home and then our laboratory into the new Medical Center here at Stanford University and you can imagine the harassment that has resulted. I was sorry to learn from your letter of your skiing accident -- they seem to be quite frequent without discouraging the enthusiasts for the sport -- but am sure that you must have recovered your usual vigor by now.

What reminded me of our previous correspondence was, of course, the magnificent achievement recently made by your colleagues in rocket technology in the first landing of a terrestrial device on the surface of the moon. They have, of course, our earnest congratulations for this great new step in a new field of scientific research. In connection with our previous conversations, I was also extremely gratified to read the very brief report in Dr. Topchiev's public announcement that measures had been taken to decontaminate the instruments. I have asked my colleagues in Washington to communicate a formal request for further information on these precautions partly as a means of further encouragement to our own administrators to emulate them.

It would flatter me to think that our conversation in Stockholm last December may have played some part in bringing the question of decontamination to the attention of your specialists in space research. I can tell you that I have been spending considerable time during the past year in pursuing the same objective in this country. Here is certainly one area where sincere international cooperation can and must play a decisive role in the furtherance of scientific objectives.

Your letter referred to the "Special Committee for Space Research", Cospar, as an existing agency for international communication on these problems. Unfortunately, even this agency has become entangled with political-national distractions and it has not been as fruitful a channel as I would personally have hoped for. I hope, however, that there may be some prospects for an amelioration of this situation to the common advantage of scientists everywhere. Meantime, I hope that we can find as many occasions as possible for communication of scientists who are interested in the basic problem of the exploration of extraterrestrial life. A group of my colleagues who are leaders in biological research in several of the universities here on the west coast of the United States have met several times to discuss some tangible experiments for the detection of planetary life by instruments which might be deposited, for example, on the surface of Mars. What a wonderful contribution it would be both to science and as a gesture for world peace if these experiments could be designed and even executed in close collaboration. Fortunately, this aspect of scientific investigation should be the furthest removed from politically sensitive areas so that this might in fact be a realistic proposal. One of my main difficulties in pursuing such a project is my ignorance of the names of the USSR biologists who might be actively interested in developing such experiments.

Your letter also referred to the collection of microorganisms from the atmosphere at high altitudes. This has also been a subject of concern to us and we have not been able to find published reports

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of such experiments as would be pertinent to our question. Certainly it would be a simpler problem in propulsion to send a vehicle through the Martian atmosphere to collect and return material to the earth rather than to secure a soft landing and new return flight. I feel, however, quite strongly that there is a remote possibility of a serious biological disaster if Martian organisms were to be deposited on the earth without some prior investigation of their potentialities for spreading and causing ecological disturbances on this planet.

I realize that these problems are even further from your scientific professional interests than they are from mine. However, in view of your remarkable insight into biological questions and your eloquently expressed concern for international cooperation, I hope that you are maintaining an active interest in them. This would be particularly gratifying if it

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furnished an occasion for the renewal of our personal acquaintance.

I must certainly agree with your remarks on the relative role of mathematics and biochemistry in the solution of the problem of biological coding.

Yours cordially,

Joshua Lederberg